

Marshfield Energy and Climate Change Committee

Recorded by Joel Trupin

Minutes of meeting 7 Nov 2011

Meeting called to order 7:10 PM chairman Richard Phillips presiding.

Attending: Rich Phillips, Anne Miller, Dan Chodorkoff, Lawrence Black, Edward Hutchinson (Plainfield) and Joel Trupin.

The minutes of the previous meeting were not read.

The status of the Twinfield roof renovations was discussed. Rich stated that of the total cost of \$900,000, \$770,000 is now available. The \$900,000 doesn't include all the necessary weatherization items, which add up to at least another \$150,000. It is proposed that putting a thin membrane on top of the existing one instead of replacing the original save money. A new qualifications package is being put together to be put out for bids. It is hoped that the timing of this bid and the fact that the elementary and HS roofs will be bid separately may bring the project in under budget.

Rich said other Twinfield energy items that will need replacement are the old boiler (eventual replacement) and the hot water system, which is leaking. Many small items will need replacement and some controls added.

Regarding home energy assessments by students, Rich presented a draft of a 3-page form he had designed, entitled Home Family Assessment. The form is designed to be used by the student and the parent to review their home energy use. One energy use area covered is the amount of energy used to heat the home in BTUs/square foot/year. a figure used to establish the heat energy efficiency of the home. This value should be below 40,000 for an energy efficient home. Items mentioned to improve energy efficiency were: insulation, thermostat setting, energy audit, hot water size and type, clothes drier use and load size.

Rich reported on another Winfield project, a computerized measure of power use in Twinfield, led by Charlie Wanzer, Debra Stoloroff and Kevin Carney. Present usage is 35 Kw/hr at all times (24/7), which is too high. A chart of Kw use shows instantaneous use and use of various time periods from the last hour to the last 3 months. Students were shown laptops continuously on in every room while the lights were turned off. Ed said that meters should be installed on every circuit breaker to monitor energy use. Students involved, The Green Team, are from 3rd grade through high school.

To get trustee approval of changing Marshfield village streetlights to improve energy efficiency, Rich and Joel attended the Sept. and Oct. meetings of the village trustees. The trustees agreed to a changeover to LEDs by Green Mountain Power. In the October meeting, they all walked through the village and assessed the need for each of the 29 current streetlights and for any additional ones. Rich purchased a light meter for \$180 to measure foot-candles emitted by each lamp. The main use of the meter is to measure room lighting at Twinfield as part of the VECAN grant project.

The results of the Energy Day, October 29, were discussed and generally viewed as successful. Attendance was light, but included four students, and conversations among attendees and presenters were lively.

A discussion ensued on a solar energy resident engagement project to be located at Twinfield and used by Plainfield, Marshfield and Twinfield. A bond issue similar to that of Norwich would fund the project. Rich is to formulate a plan to present to the towns.

Meeting adjourned at 8:20 pm